



Program 1

Purpose

To distinguish various fish species found in Kentucky.

Academic Expectations

1.1, 1.2, 1.3, 1.10, 2.1, 2.2, 2.3, 2.4, 2.6, 2.19, 2.20, 2.22, 2.27, 2.35, 2.36, 3.4, 3.7, 4.4, 5.1, 6.1, 6.3

Objectives

1. Compare fish found in the state.
2. Identify various habitats associated with species of fish.
3. Identify limiting factors of animal populations.

Kentucky's Unusual Fish

Vocabulary

- anal fin:** A spiny or soft-rayed fin situated on the midline of the belly behind the anus.
- caudal fin:** The tail fin of a fish.
- dorsal fin:** A fin or fins located along the midline of fish's back, usually near the midpoint.
- fry:** Newly hatched fish.
- fish:** An animal with a backbone that breathes with gills and lives its entire life in water.
- fingerling:** A young fish usually less than 6 inches.
- gill:** The organ with which a fish extracts oxygen from water.
- gill cover:** The thin bony plate on the sides of the fish's head that protects the delicate structures of the gills.
- gill raker:** A body arch whose rear edge is fringed with a dense series of tiny blood-filled filaments that absorb oxygen from the water passing over them - found in paddlefish.
- ichthyologist:** Scientist trained in the study of fishes.
- lateral line:** A series of small sensory pores connected to a series of scales extending along the side of a fish.
- snout:** The extreme forward point of a fish's head.
- spawn:** The act of mating and reproduction in fish.

Project Wild Activities

Fishy Who's Who, Fashion a Fish

Lab Sheet

1. Kentucky's Unusual Fish
2. Diagram of the Spiny-rayed Fish and Soft-rayed Fish

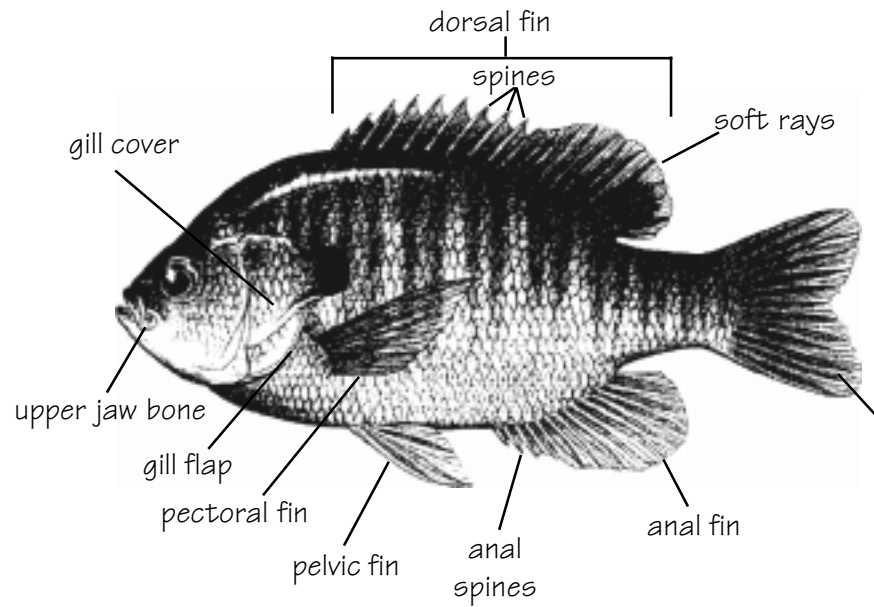
Outcomes

List the types of aquatic habitat found in Kentucky and choose fish which may be found in that habitat.

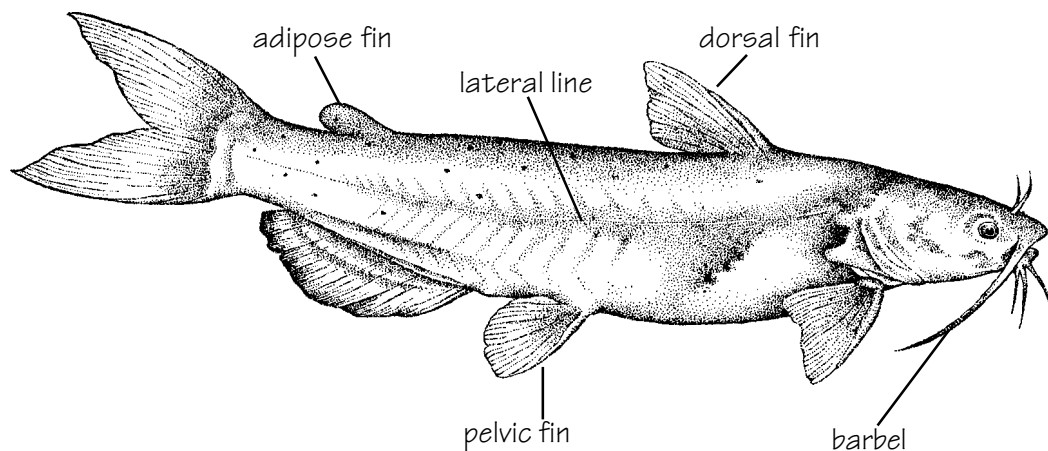
Identify the public fishing opportunities found in your county.

Spiny-rayed Fish

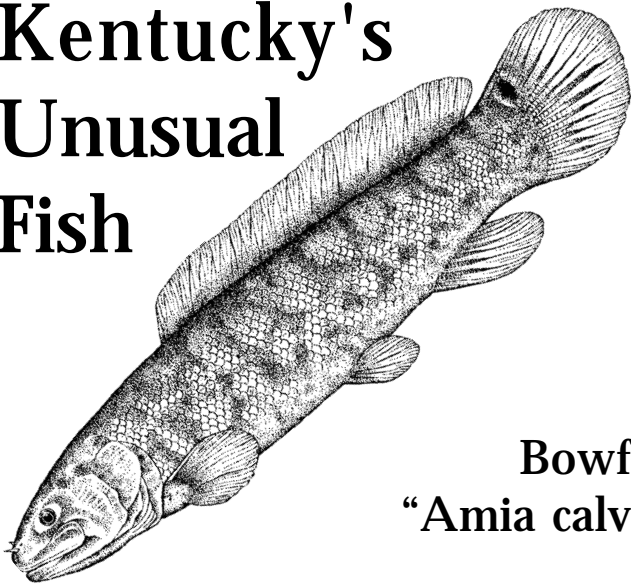
LAB SHEET 1



Soft-rayed Fish

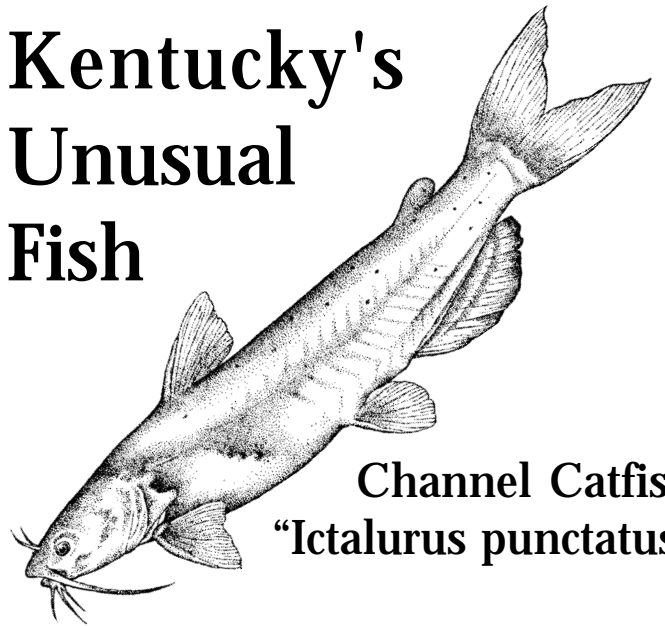


Kentucky's Unusual Fish

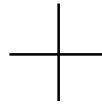


Bowfin
"Amia calva"

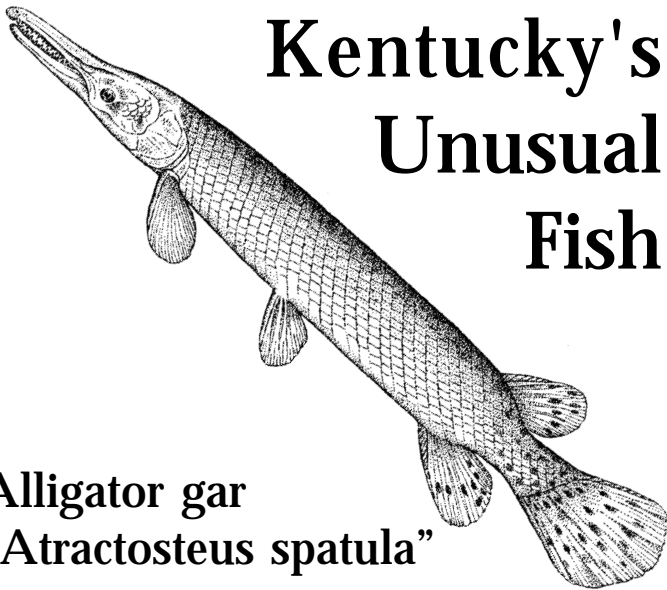
Kentucky's Unusual Fish



Channel Catfish
"Ictalurus punctatus"



Kentucky's Unusual Fish

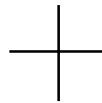


Alligator gar
"Atractosteus spatula"

Kentucky's Unusual Fish



Paddlefish
"Polyodon spathula"



Kentucky's Unusual Fish



Shovelnose sturgeon
"Scaphirhynchus platyrhynchus"

Kentucky's Unusual Fish



American eel
"Anguilla rostrata"

Channel Catfish “*Ictalurus punctatus*”

Description: Deeply-forked tail, dark spots on the body, average weight between 2 and 7 pounds.

Habitat: Rivers, streams, lakes, ponds

Facts:

- * varied diet includes fish, insects, crayfish, worms, dead materials
- * most active at night, retire to deep water during the day

Paddlefish “*Polyodon spathula*”

Description: Bluish-gray with long paddle-shaped snout, large mouth and small eyes. No scales except for a few on upper lobe of caudal fin, very ancient fish.

Habitat: Large, low-gradient rivers, periodically found in flooded oxbow lakes.

Facts:

- * Lives up to 30 years, grows up to 200 lbs.
- * Spawns from April-June
- * Fishermen catch them by snagging, eggs are eaten for caviar.

American eel “*Anguilla rostrata*”

Description: Only eel found in America. Well-developed jaws, snake-like, no pelvic fins.

Habitat: Large streams and rivers

Facts:

- * After several years of living in freshwater, they migrate downstream to the Gulf Stream to salt water, go to breeding grounds south of Bermuda, spawn and die. Eggs hatch and larvae drift with Gulf Stream, eventually finding their way into freshwater streams.
- * average length is 30 inches, weight is 3 lbs.

Bowfin “*Amia calva*”

Description: Primitive skeleton, partly bone, partly cartilage. Round head, long, low dorsal fin.

Habitat: Rivers, oxbows, and swamps

Facts:

- * Weighs around 4 lbs, length averages 34 inches
- * feeds on fish and crayfish

Alligator gar “*Atractosteus spatula*”

Description: Long, brown fish with long slender snout. Top of head and snout without spots.

Habitat: Rivers, oxbow lakes, swamps

Facts:

- * Feeds on other fish
- * One of the largest freshwater fish in North America
- * Spawns from early May to mid-June.

Shovelnose sturgeon “*Scaphirhynchus platyrhynchus*”

Description: Broad flat head, eyes small, rows of bony plates along sides.

Habitat: Shallow areas and deep channels of larger rivers

Facts:

- * eats fish and insects
- * average length is 36 inches
- * there are 7 species of sturgeon found in the U.S., eggs eaten for caviar.